Reproductive Quarterly

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In this newsletter:

Barriers to Adequate Prenatal Care in Utah

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Background

Inadequate prenatal care (PNC) is a risk factor for low birth weight births and other adverse pregnancy outcomes. Women who receive adequate PNC have a reduced risk for having low birth weight infants; risks for maternal and infant morbidity and mortality are also reduced because adequate PNC typically identifies high-risk pregnancies early in gestation and provides risk reduction interventions.

"Women who receive adequate PNC have a reduced risk for having low birth weight infants..."

Healthy People 2010 (HP2010) is a national health promotion and disease prevention agenda developed by the U.S. Department of Health and Human Services. Its goals serve to improve the health of all U.S. inhabitants by the year 2010. The HP2010 goal for pregnant women is for 90% to begin PNC in the first trimester of pregnancy. The U.S. baseline measures for first trimester entry in 1998 were 83%. In 1998 the rate of first trimester entry into PNC in Utah was 80%[1]; in 1999, the rate was 81%.

Methodology

Data for this report were provided by the Utah Pregnancy Risk Assessment Monitoring System (PRAMS). PRAMS is an ongoing, population-based risk factor surveillance system designed to identify and monitor selected maternal experiences that occur before and during pregnancy and experiences of the child's early infancy. The PRAMS data reported here represent all live births to Utah residents in 1999. A total of 2140 mothers were selected to participate in the project and 1540 mothers responded, for a response rate of 72%. Survey results are weighted for non-response so that analyses can be generalized to the entire population of Utah women delivering live births. PRAMS data were analyzed using chi-squared tests to identify significant barriers to early and adequate PNC. (See Barriers, page 3).

ANNOUNCEMENTS...

New Additions to the Reproductive Health Program Staff!

The Reproductive Health Program would like to welcome the following people to the program:

Laurie Baksh
PRAMS Operations Manager
Janine Lambros
Program Secretary
Kathy Pope
Case Manager, WeeCare
Pete Barnard
Perinatal Review Coordinator
Melanie Wallentine
Reproductive Health Promotion Specialist

Postpartum Depression Fact Sheet

The Office on Women's Health, within the U.S. Department of Health and Human Services, has upated its fact sheet, Women and Postpartum Depression. The fact sheet discusses the range of symptoms associated with postpartum depression, as well as risk factors, treatments and resources. It is available online at http://www.4woman.gov/owh.pub/factsheets/postpartum.htm

Disparities in Perinatal Outcomes Between Hispanic and Non-Hispanic Women in Utah

Debby Carapezza, F.N.P.

The second largest and most rapidly growing segment of Utah's population is Hispanic. From 1990-1999, the percentage increase in total population among Hispanics in Utah was 76%, compared with 18% for American Indians, 58% for Asian/Pacific Islanders, and 60% for Black/African-Americans.[1] Unfortunately, analysis of data reveals that perinatal outcomes among this growing Utah population lag behind their Non-Hispanic counterparts in entry into prenatal care, adequacy of prenatal care, birth weight, and infant mortality.

Entry into Prenatal Care

Nationally, in 1998, 74.3% of Hispanic women entered prenatal care in the first trimester of pregnancy, compared to 87.9% of Non-Hispanic women.[2] In Utah, from 1997-1999, only 61.5% of Hispanic women received prenatal care in the first trimester, while 81.9% of Non-Hispanics did. Even lower percentages were noted among Hispanic women in Tooele County Health District (61.3%), Salt Lake Valley Health District (58.6%), Southwest Utah Health District (57.9%), and Summit County Health District (42.9%). Hispanic women are over-represented among women receiving no prenatal care and women entering prenatal care in the third trimester. Statewide in 1999, only 3.2% of Non-Hispanic women delayed prenatal care until the third trimester, compared to 7.6% of Hispanic women. In 1999, only 0.35% of Non-Hispanic women in Utah failed to receive any prenatal care, but among Hispanic women, 1.1% failed to receive prenatal care.[3]

"...only 47.2% of Hispanic women received adequate prenatal care."

Adequacy of Prenatal Care

Prenatal care adequacy was determined using the Adequacy of Prenatal Care Utilization (APNCU) index developed by Milton Kotelchuck. Adequacy of prenatal care, as defined by Kotelchuck, examines two dimensions of care. The first dimension is the timing of initiation of prenatal care, and the second, the ratio of the actual number of prenatal visits to the expected number of visits based on the American College of Obstetricians and Gynecologists' standards. The number of visits is adjusted for the gestational age at initiation of care and gestational age at delivery.[4] According to these criteria, from 1997-1999, only 61.7% of all Utah women received adequate prenatal care. Moreover, 63.5% of Non-Hispanic women received adequate prenatal care, while only 47.2% of Hispanic women received adequate prenatal care.[3]
(See Disparites, page 3).

Disparities

(continued from page 2)

Low Birth Weight

Low birth weight babies are more likely to experience expensive neonatal intensive care costs due to respiratory and metabolic problems associated with immaturity. Additionally, they may have subsequent health problems such as neuro-develomental disorders, cerebral palsy, deafness, blindness, seizure disorder, chronic lung disease, and learning disabilities.[5]

From 1997-1999, 6.7% of Non-Hispanic births resulted in low birth weight infants (less than 2,500 grams), whereas 7.2% of Hispanic births resulted in low birth weights. When looking at country of origin, even greater disparities are noted. However, interpretation of these data are limited due to small numbers in these population subgroupings.[3]

Between 1997 and 1999, the percentages of very low birth weight births (less than 1,500 grams) among Hispanic and Non-Hispanic women were very similar, 1.2% and 1.1% respectively.[3]

Infant Mortality

From 1997 through 1999, there were a total of 134,380 live births in Utah. Among these births, there were 728 infant deaths, an infant mortality rate (IMR) of 5.4 per 1,000 live births. Among Non-Hispanic infants, the IMR was 5.3, but for Hispanic infants the IMR was 6.1.[6] Data are not available by country of origin for this study period. (See Disparities, page 4).

Barriers (continued from page1)

Prenatal Care in Utah

Overall, in 1999, 81.1% of women entered PNC in the first trimester, 17.7% entered care in the second or third trimester, and 0.2% said they did not receive PNC during their pregnancies. Of all Utah women, 83.2% said they received PNC as early in their pregnancy as they wanted, 16.3% indicated they did not receive care as early in their pregnancy as they wanted, and 0.5% indicated that they did not want PNC.

Figure 1. Adequacy of Prenatal Care in Utah, 1999 Utah PRAMS Data

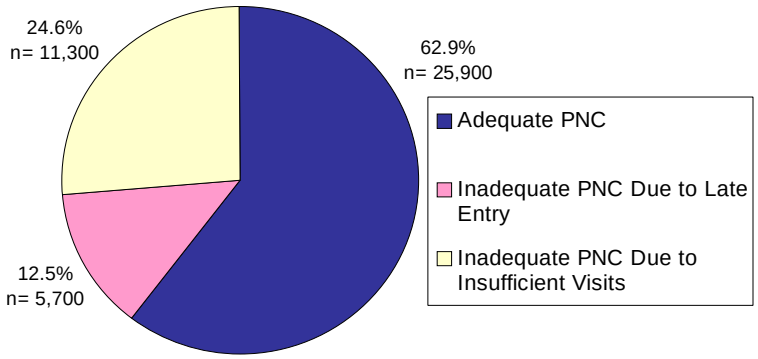

Figure 1 illustrates the adequacy of PNC in Utah. In 1999, 63% of women received adequate PNC, 12.5% received inadequate care due to late entry and 24.6% received inadequate PNC due to an insufficient number of visits, despite appropriate entry time.

Inadequate Prenatal Care Due to Late Entry

Overall, 5,700 women (12.5%) who delivered a live birth in Utah received inadequate care due to PNC initiation after the first trimester. Maternal age, level of education, race, Hispanic ethnicity, marital status, geographic area, household income, PNC payer type, intention of the pregnancy, smoking before pregnancy, and timing of pregnancy recognition were significant barriers among women who received inadequate care due to not entering prenatal care in the first trimester. (See Barriers, page 4).

Disparities

(continued from page 3)

Conclusions

Whether the Hispanic infant was born to parents who are U. S. citizens or to undocumented parents, poor pregnancy outcomes have a negative impact, not only on the infant and his immediate family, but on all of society.

References

1. U.S. Bureau of the Census, Population Division. (1999, July 1). Population estimates for counties by race and Hispanic origin. [On-line]. Available: http://www.census.gov/population/estimates/county/crh/crhut99.txt

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4. Kotelchuck, M. (1994). An Evaluation of the Kessner Adequacy of Prenatal Care Index and a Proposed Adequacy of Prenatal Care Utilization Index. American Journal of Public Health, 84, (9), 1414-1420.

5. Utah Department of Health, Division of Community and Family Health Services. (1999). Report on Low Birth Weight in Utah. Salt Lake City, UT: Author.

6. Utah Department of Health, Office of Vital Records and Statistics. (1999, 1998, 1997). Utah's Vital Statistics, Births and Deaths. (Technical Reports 212, 208, 202). Salt Lake City, UT: Author.

Barriers (continued from page 3)

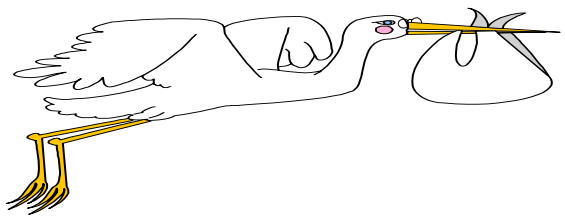
- Among women under 19 years of age, 30.9% received inadequate PNC due to late initiation, compared with 5.7% of women older than 35 years of age.
- Of Utah women with less than a high school education, 23.8% did not receive early and adequate PNC, compared with 9.3% of women with more than a high school education.
- Thirty-three percent of other than white women did not receive early and adequate PNC.
- Hispanic women (21.3%) were more likely than non-Hispanic women (11.2%) to receive inadequate care due to late entry.
- Unmarried women (24.7%) were more likely to receive inadequate care due to late entry than were married women (10.2%).
- Women residing in Utah's urban areas (15.8%) were more likely to receive inadequate PNC due to late entry than women residing in rural areas (5.5%).
- Of women with an annual household income less than $15,000, 24.1% did not receive adequate PNC due to late entry, compared with 5.5% of women with an annual income greater than $50,000.

"Among women under 19 years of age, 30.9% received inadequate prenatal care due to late initiation..."

- About 23% of Utah women whose PNC was paid by Medicaid received inadequate PNC due to late initiation, compared with 8.0% of women whose PNC was covered by private insurance.
- Women with unintended pregnancies (17.9%) were more likely to receive inadequate PNC due to late entry than women whose pregnancies were intended (8.5%).
- Of women who smoked cigarettes in the three months before the pregnancy, 21.1% did not receive adequate PNC due to late entry, compared with 10.7% of women who did not smoke.
- Of women who recognized their pregnancies after nine weeks gestation, 20.4% received inadequate PNC due to late entry.

Self-Reported Barriers to Early Prenatal Care

To assess barriers to early PNC, PRAMS respondents were asked the question, "Did you get PNC as early in your pregnancy as you wanted?" Those who responded negatively to this question were further asked to select items from a list of barriers to getting care as early as they wanted. (See Barriers, page 5).



MORE ANNOUNCEMENTS...

Utah Perinatal Association's Annual Conference

The Utah Perinatal Association's annual conference will be held October 25-26, 2001 at the Gathering Place in Midvale. The title of this year's conference is, "SOAR with UPA". CEUs will be available for attending. Watch for further information between now and the end of July.

25th Annual Snowbird Continuing Education Conference

The 25th Annual Snowbird Continuing Education Conference, sponsored by the Utah Nurse Practitioners and Utah Academy of Physician Assistants, will be held August 8-10, 2001 at Snowbird. For more information, contact: Bernadette Bettner @ 801-273-7309 (H) . The cost after July 15 is $300.00 for the full conference or $150/day. The cost for Student Nurse Practitioners and Student Physician Assistants is $175 for the full conference or $100/day. Approximately 24 CEUs are available.

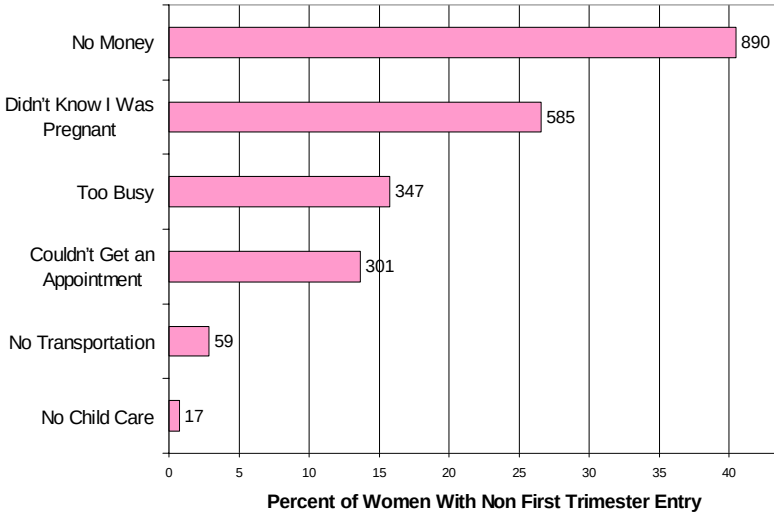
Barriers (continued from page 5)

Of women noted to have inadequate PNC due to late entry, 38.9%, about 2,200 Utah women, said they did not get PNC as early in their pregnancy as they wanted. Conversely, 61.1% of women who did not receive adequate PNC due to late entry said they received PNC as early as they wanted. It appears that many Utah women were not aware that first trimester PNC is important. Figure 2 illustrates self-reported PNC barriers for women with inadequate PNC due to late entry.

"The largest barrier to early PNC...was lack of money."

The largest barrier to early PNC reported by Utah women with late entry was lack of money. Not knowing of the pregnancy and being too busy to get PNC were also barriers to first trimester PNC.

Figure 2. Self Reported Barriers to Early Prenatal Care Among Women With Inadequate Prenatal Care due to Late Entry, 1999 Utah PRAMS Data



Summary/Recommendations

There is definite need for improvement in the entry and adequacy of PNC in Utah. At 81% for first trimester entry into PNC, Utah falls short of the Healthy People 2010 goal of 90%.

Further study is needed to look at health care system practices to determine what changes are needed that would enable more pregnant women to receive early and continuous PNC. Focus groups of pregnant women and prenatal providers should be conducted to gain more insight into barriers to PNC entry and utilization, and possible solutions to addressing these issues. One method to combat Utah's low adequacy of PNC rates is to educate women as to the importance of early and continuous PNC before they become pregnant.

Barriers

(continued from page 5)

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1. Utah Department of Health, Division of Community and Family Health Services. (2001). CFHS Division Plan and Report. Salt Lake City, UT: Author.
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Helping Pregnant Women Kiss the Marlboro Man Goodbye

Lois Bloebaum, B.S.N., R.N.

During the year 2000, the Reproductive Health Program within the Utah Department of Health (UDOH) carried out a community intervention designed to encourage prenatal health care providers to counsel pregnant patients to quit smoking during pregnancy, to help them to avoid relapse after giving birth, and to refer smokers for cessation treatment. Although health care providers may not realize it, they can be extremely influential in promoting smoking cessation. Each year, 1.7 million more smokers would quit if a health care provider advised them to do so.[1] Pregnant women themselves say that prenatal visits are an ideal time for smoking cessation advice. Smoking cessation counseling is not part of the curriculum in most medical schools, and only 21% of practicing physicians state that they feel qualified to help a patient stop smoking.[2]

Although patients say visits to a doctor are an ideal time for smoking cessation counseling, many health care providers may have little or no training or expertise in this area. The goal of this program was to increase the number of prenatal care providers who screen their patients for smoking, and then counsel and refer patients who smoke for cessation treatment. Women who are successful at smoking cessation will have improved pregnancy outcomes, including higher birth weight infants and lower neonatal mortality rates. Their infants will have a reduced risk of Sudden Infant Death Syndrome and without the exposure of environmental tobacco, they will suffer fewer upper respiratory illnesses. Finally, impacting parental smoking habits may decrease the chance that the infant will ultimately become a smoker.

"Each year, 1.7 million more smokers would quit if a healthcare provider advised them to do so."

This program, "Helping Pregnant Women Kiss the Marlboro Man Goodbye: An Intervention for Prenatal Care Providers", was developed using Centers for Disease Control (CDC) funding through a collaborative effort between the UDOH Reproductive Health Program (RHP) and the Utah Perinatal Association (UPA). UPA is a non-profit organization whose primary goal is to improve perinatal health care throughout the state of Utah. It is comprised of nurses, nurse midwives, physicians and other perinatal health professionals. Education of perinatal healthcare providers is the primary strategy by which UPA reaches its goal. (See Marlboro, page 7).

Marlboro

(continued from page 6)

The intervention consisted of the following:

- ◊ a cover letter (ghost authored by a physician who is a smoking cessation leader in the community),
- ◊ an article on smoking cessation for pregnant women,
- ◊ a brochure entitled, "Helping Smokers Quit", which was developed by the Agency for Health Care Policy and Research and promotes the "5 As" (Ask, Advise, Assess, Assist, Arrange), and
- ◊ a tablet of tear-off sheets providing quit tips and telephone numbers for the American Cancer Society (ACS) and the UDOH Tobacco Prevention Program.

The ACS and the UDOH Tobacco Prevention Program agreed to provide information to patients for smoking cessation treatment. These packets were mailed to the 458 prenatal care providers throughout the state.

The RHP staff administered a pretest survey to a sample of the 458 prenatal care providers practicing in Utah. The results indicated that although most providers are completing an initial screening for smoking when their clients enter prenatal care and counseling their patients about the risks, they are doing little to promote relapse prevention and referral to more intensive cessation services.

A post-test survey was distributed to the prenatal care providers six months after the distribution of these materials to assess behavior change, as well as their perception of the main barriers to achieving smoking cessation success.

The following is an analysis of the post-test data, which indicate that our Utah prenatal care providers are generally doing well in screening and counseling their pregnant patients about smoking.

Survey Question:	**Prenatal Healthcare Provider Response:**
How frequently do you determine if your pregnant patients smoke?	Over 89% of respondents replied that they "always" screen their pregnant clients for smoking.
Among pregnant patients who smoke, how often do you ask if they are still smoking?	Approximately 33% responded that they ask at each visit until quit, and approximately 41% replied that they ask at each visit even after quitting to check for relapse.
What type of tobacco cessation services do you provide to pregnant patients?	- Over 93% responded that they counsel their patients themselves. - Only 45% stated that they referred their patients to smoking cessation programs. - Over 61% stated that they prescribed pharmacological interventions, e.g. nicotine replacement. - Approximately 65% replied that they discuss the dangers of secondhand smoke with their patients.
How many smoking cessation counseling sessions will a patient get during a typical pregnancy?	The mean number of sessions that respondents offer was 3.2.
About how long is each smoking cessation counseling session that you offer?	The mean number of minutes that respondents report counseling their patients was 5.6.

The Reproductive Health Program continues to be committed to the goal of decreasing smoking among pregnant women in Utah. If you are interested in receiving free tear-off sheets of "quit tips" for your pregnant patients, please call the Reproductive Health Program at 801-538-9970.

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1. Hershberger, P. (1998). Smoking and pregnant teens. Lifelines: Association of Women's Health, Obstetric and Neonatal Nurses, 2 (4), 26-31.
2. Ferry, L.H., Grissiono, L.M., & Runfola, P.S. (1999). Tobacco dependence curricula in U.S. undergraduate medical education. Journal of the American Medical Association, 282, 825-829.

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